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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,710	12/24/2003	Norbert Brun	0589-1001	8329
466	7590	09/07/2005	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			LEE, GUNYOUNG T	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/743,710

Applicant(s)

BRUN ET AL.

Examiner

Gunyoung T. Lee

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/03</u> | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement filed 12/24/2003 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

### *Drawings*

2. The drawings are objected to because cutout "1" in Fig. 1 does not agree with the descriptions: in the specification, page 5, lines 4-7, "a cutout 1 on one side of the plane passing through the geometric axis of the source S and **parallel to the optical axis Y-Y**"; and in claim 1, lines 7-10, "a cutout situated on one side of the plane passing through the geometric axis of the light source and **parallel to the optical axis** of the ellipsoidal reflector". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The disclosure is objected to because of the following informalities: on page 5, lines 4-7, "a cutout 1 on one side of the plane passing through the geometric axis of the source S and **parallel to the optical axis Y-Y**" does not properly describe the feature "1" in Fig. 1. Appropriate correction is required.

### ***Claim Objections***

4. Claim 1 is objected to because of the following informalities: (a) Claim 1, lines 7-10, "a cutout situated on one side of the plane passing through the geometric axis of the light source and **parallel to the optical axis** of the ellipsoidal reflector" does not agree with the feature "1" in Fig. 1; (b) Claim 1, line 8, the phrase "the plane" lacks proper antecedent basis; (c) Claim 1, line 18, the phrase "the source" lacks proper antecedent basis. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

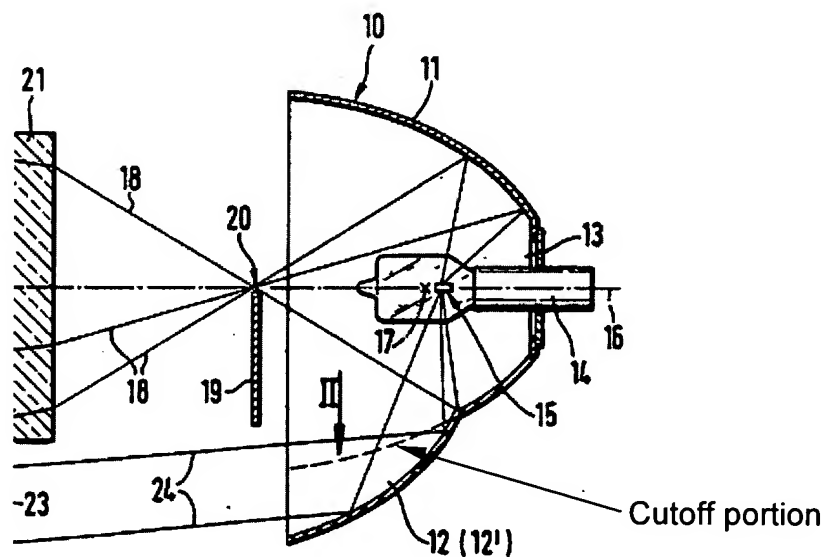
6. Claims 1, 2, 6 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kretschmer et al. (US 4,772,987).

7. In regards to claims 1, 2, 6 and 16, Kretschmer et al disclose a headlight having:

- A reflector (Fig. 1, 11) and a light source (15) running transversely to the optical axis (16) of the reflector and placed near the focal point of the reflector (11);
- Wherein the transverse light source (Fig. 1, 15) placed near the internal focal point of an ellipsoidal reflector (11) (col. 2, lines 42-44);
- The wall of the ellipsoidal reflector (Fig. 1, 11) has a cutout situated on one side of a plane passing through the geometric axis of the light source and parallel to the optical axis of the ellipsoidal reflector (11);
- A lens (Fig. 1, 21) with an optical axis parallel to or coincident with that of the ellipsoidal reflector (11) is placed in front of the reflector;
- A verticalized reflector (Fig. 12) is arranged on the opposite side of the cutout to the most-part of the ellipsoidal reflector (11);
- The verticalized reflector (Fig. 1, 12) being designed to produce a long-range beam (24) which is not intercepted by the lens (col. 3, lines 1-8);

Art Unit: 2875

- Wherein the surfaces of the verticalized reflector (Fig. 1, 12) have a focal point that lies near the light source (15);
- Wherein the ellipsoidal reflector (Fig. 1, 11) is situated above the horizontal plane while the verticalized reflector (12) is situated below the plane;
- Wherein the ellipsoidal reflector (Fig. 1, 11) has a cover (19) situated near the external focal point so that the outgoing beam lies essentially below a determined level;
- Wherein the upper edge of the cover (Fig. 19) is situated below the horizontal plane passing through the optical axis (16) of the reflector (11) (col. 2, lines 53-57).



***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 3-5, 7, 11-15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kretschmer et al. (US 4,772,987) as applied to claims 1, 2 above, and further in view of Takada (US 6,435,703).

11. In regards to claims 3-5, 7, 11-15 and 17-20, Kretschmer et al. disclose the invention substantially as claimed except for:

- A verticalized reflector having striations delimiting at least one central facet and two lateral facets (claim 3);

- The beam produced by the verticalized reflector has an aperture at most equal to  $\pm 20^\circ$  on each side of the optical axis (claims 4, 14, 15);
- The beam produced by the ellipsoidal reflector has an aperture of about  $\pm 40^\circ$  on each side of the optical axis (claim 5);
- A verticalized reflector designed to create a V-shape cutoff (claims 7, 20);
- An ellipsoidal reflector situated below the horizontal plane passing through the transverse axis of the light source and parallel to the optical axis of the reflector, while the verticalized reflector is situated above this plane (claim 11);
- A discharge bulb light source (claim 12);

Takada discloses a vehicular headlamp having:

- A verticalized reflector (Fig. 3, 34A) having striations delimiting at least one central facet (34s1) and two lateral facets (34s2, 34s3);
- An ellipsoidal reflector (Fig. 2, 24) situated below the horizontal plane passing through the transverse axis (Ax) of the light source and parallel to the optical axis of the reflector, while the verticalized reflector (34A) is situated above this plane;
- A discharge bulb light source (col. 4, line 53).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the ellipsoidal and verticalized reflectors and the discharge light bulb as shown in Takada for the headlight system of Kretschmer et al. to control the horizontal diffusion deflecting reflection with greater precision. This will also improve the external appearance of the projection-type headlamp.



12. In regards to (a) the beam produced by the verticalized reflector and having an aperture at most equal to  $\pm 20^\circ$  (claims 4, 14, 15), (b) the beam produced by the ellipsoidal reflector and having an aperture of about  $\pm 40^\circ$  (claim 5), and (c) a verticalized reflector designed to create a V-shape cutoff (claims 7, 20), Takada acknowledges that the reflectors are not limited to specific configuration (col. 2, lines 25-28). It would have been obvious to one of ordinary skill in the art at the time of the invention to produce the beams reflected by the verticalized reflector and the ellipsoidal reflector with aperture angles of  $\pm 20^\circ$  and  $\pm 40^\circ$  respectively and to design the verticalized reflector to create a V-shape cutoff, since it has been held that discovering an optimum value of a result-effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

13. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kretschmer et al. (US 4,772,987) and Takada (US 6,435,703) as applied to claims 1, 7 above.

14. In regards to claims 8-10, Kretschmer et al. disclose the invention substantially as claimed except for:

- The upper edge of the cover situated below the horizontal plane passing through the optical axis of the reflector, particularly about 1.5 mm below (claim 8);
- The optical axis of a lens is offset with respect to the optical axis of the ellipsoidal reflector (claim 9);

- A lens arranged in such a way that its focal point is behind, particularly about 1.5 mm behind, the external focal point of the ellipsoidal reflector (claim 10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to position the cover and the lens at a particular location with respect to the optical axis or the focal point of the reflector, since it has been held that discovering an optimum value of a result-effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Conclusion***


15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nino (US 4,885,669) and Eichler (US 5,967,647) show a vehicle headlight having primary and secondary reflectors and a light shield.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gunyoung T. Lee whose telephone number is (571) 272-8588. The examiner can normally be reached on 7:30 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GTL  
8/30/2005



JOHN ANTHONY WARD  
PRIMARY EXAMINER